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2600 Magazine PO Box 752 Middle Island, NY 11953 U.S.A.

WARNING:

The Monthly Journal of the American Hacker

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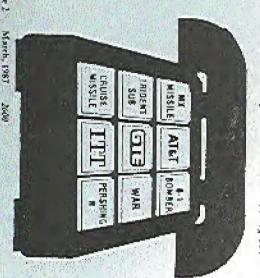
### Reach Out and Touch a Nuclear Weapons Contractor

sending you a special balloc (if it hasn't done all tengrélatance phone companies was tres to manities to join in begenting not just ATAT but cardian for "dial-1" service. Be pure to make an stready), asking you to pick a tong-distance Your Jacal selaphane company will suon be the nuclear weapons inclusing, couraging individuals, organizations and con-AND SAME OF CHOICE. MICHAEL WICE TO BE TO BESTOR OF ST.

namality leas than \$10. contractors, and, of these, all but MCI and others are abolly to partly-owned by milliary CONTROL OF BUILDING TO BE ADMINED CONTROL ... research, no ties to the Department of Defense. All the Of the major long-distance relegions companies Mestern Usees are profitted directly from the available in the United States, only Alinet has long-distance service, you as a still switch to a weapons. Even if you have already selected a production or tealing of aucless

Tauch a Nortean Mempons Contractor," which profrom MEA, 325 East 25th St. Baittimore MD 31813.1 tives available nationally. (Avadiable for \$1 files but the nuclear and con-suclear alterna-For more information, write for Nuclear Free America's new flyer entitled "Reach Out and

to det bligknow your reasons for doing so. Madison Ave. New York, NY 10072; 212-644-1000) to call or write ATAT Chairman James Olson (SSO P.S., II you do switch from ATAT, please be sure



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compass applications can create—and when the the remain things that provential subject. But we'll reasone to devent handand), an handigu an ma dan ber da spir Our CONTON artists this mouth is

Office .

containly isn't. We think proof of our problems has adject of the power remaint will recognize themselves in this we've appointed phone pheeding. Or healf specials reduce towards for play feathacad in this property's issue. White that subject in our issue. We've gove buyeyto have the wark of a falcated Jolk entire As always, there's ware than one

find for above of jean man still hereof

drafting with this major problem of the merged. But this still engit to be a big help to eep oor who's had trouble mentioned, in fact, here objecteen that your, One or two of the awayands repaid necess that was actually released devoted some space to on article on phase of themily, that is, we've Figured and have to make a long distance

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Hov 99, Middle Island, NY 11953. please du Nie saw jug for arrêles we provi, so that might be incentive for varie of year, Send subabblions to PO And if you have articles to seed us,

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Fage 3

# The Ballad of

by Milica Agrandil

recifetion should be prefaced with this overworked inlagmation. Any mading of this character of any story are not to be attributed to the real person, but are strictly lightests of my actions and motivations concerning the main are in essence true. However, the rest of the got his name and calling himself around the world and the little anecdatal passages about how he Crunch is a phone freely and computer felorer attoutited a real person's name. The real Capitain story about an imaginary person to whom I have story about a real person. Or, rather, a fictitious "The Ballad of Captain Crinch" is a tetribus

And get all our phone calls for ties

is the man that they call, CAPTAIN CHUNCH but alone, at the top of the fact of those manus and the infamous wild Dalton bunch. You sing of Doc Helfiday and old Jesse James Of those other brave hences of old. The Lone Hanger and Tonto and Jorg and all The five with the heart of pure gold. You tell of your Robin Hood logand.

Now perhaps you might laugh at this curious

Re sounds like no prints among thickes. Well, he reboas from the rich, the richest there And well you may ask from it is that he came fo be nationed with such greats as these

And were not for him, we'd be bent neath a Though he cook not a parity of plunder

We never could get out from under

His weapon—an Apple computer His target—The Phone Company His old trusty gun was a soldering one THIS DUTIES, AT WASH AND I.C. Stop a coach and cry, "Stand and deliver!" He carried no longbow or quiver. He never went armed with a pistol or sword I wasn't his style to go duckle his swash

And make begoes and toolers to foot their In prost to rip of Ma Se. Applying the knowledge we picked up in college Out of old Army surplus LC St. We'd bread-board electronic circuits and less politie nicknames as well Sixe-boxers", they called us, and "phone heaks

And boke into their internal system. And we all got \$10.'s and moders. And did all kinds of shit that just pissed 'ent' Or give us a new code to bust And something they data and hed up their trunk For us, it was mostly the challenge. hey'd close down a loophole, or put up a block game between Ma Bell and us.

They'd harrassed him with bills for beginstance An old clerical error by Ma Bell had left him But twas more than a game for the Captain With leadings that were less than kind, He had a deal axe to gaind.

He took up the blue-boxers' trade. And twas only after they stud off his service or calls that he never had made

He learned the trade well, and soon made he

When he found that the switching code locks Could be broke with a tone from a whistle that

And never get charged for the call In a Captain Crunch tereal box. Give the whistle a blast, dizi the number he And before the phone rang at all. He would dial up an 800 number.

And talked to hinself round the world! Via satellite, cable, and microwave relay Diopped a dime, and his signal he hurled You might say that he'd found his true calling From a pay phone in Grand Central Station That still stands as a legend today. ASSOCIATION WHOSE THIS Talent Lay. remember the time that he pulled oil a lead

# Captain Crunch

Bon't know what he looked like at where he I never knew his true name. Serior Beller

At the North Maritoba Connection. And I met him along with the rest of that every And his tireless quest for perfection. But I counted him friend, just the same. All I knew was his voice and his renegatio sou

A produce of bunk lines from provinces north Was a ceotral Canadian exchange, Through a quick in the system that Bell never With a side elfect that was most strange: Now, the North Manifoba Competion

As the ultimate free conference call Those who knew how could use the exchange if they even know of it at all j

And converse with whoever was there. You could dial up a code any time, day or night I was the permanent floating blue-boxers'

With membership from everywhere, there was liggy from Fargo, and "Sparks" from

And we'd bullshit for hours, swap jokes, or talk And the Swereon boys out of St. Paul. Detroit

Or just listen, say wathing at all



If was sometimes so crowded, you just couldn't

And hints of new products as well He had access to codes and computer net links Now, Lenny, he was our inside man But one night, at a quarter to three An R&D tech at Ma Bell the Captein, and Leavy, and me. There were only the three of us on the exchange

> On a miniaturized personal phone And he total us, "They've made a new

Till we each could have one of our own. The bandwidth's been squeezed and the lines 

Or be surgically placed in your head And the witt's so small, it could fit in your ear Said I, "I'd ranove it to go on vacation!" that would be illegal!" he said.

How the hell could you turn the string off? You could never hang up, leave the phone of the "George Orwell's 1984 is at hand!" Then he said, with a sputter and oough, A pregnant moment of silence.

It would be more like 'Big Mother's Or be out of the reach of Big Brother Except that with aid Ma Bell at the controls,

As only the Phone Company can, "My God!" says Lerny. "What on Earth can we Smile, and loss it goodbye!" they'll put ads on TV, shove it down all our You might as well take what's left of your for give the contraption a try. "Once they convince the American public ADEALM

"Have you ever heard of a grentin?"
That creature of legend that lurks to the howels of a system as complex as this 'pe And makes sure the damp thing never works?" to such luck!" replied Lenny. "They've got the bugs out.

Ways the Captain, "Thave a plant"

But the Captain said, "Oh; but they will they tirushed a field trial, did not see a glitch." They've run all the kinks through the mill

1600

# Getting the Most Out

Under Stut And

The oxing of good old Ma Bell has rendered wrong everything you new know about phone companies. The procedure for placing a long distance call is now above the understanding level of a good proportion of the public, and the various companies are doing very little to educate them. Thus this attempt to inform the reader what now exil lives at the other and of his pair.

In areas that are now equal access, it is possible repliabels long distance call using any of the carriers who will complete it for you. You do not have to have previously set up an account with the carrier, as in the past. They will complete the call and pass the billing back to your local operating company (LOC), which is turn bills you for the call. So to place the call via the "alternate" certier, you pick up and that:

10min + 1 + area code + number

The ram is reagic: it allows you to select a different carrier for that call. There are a cillion little Moran-Pop carriers in different areas, but here are some of the major areas whose sposss codes should be fairly consistent.

220: Whethern Union— consistently had audio 90% of the time

222: MCI — duplexey thes sometimes 288: AT&T — you know the story

333: U.S. Telecom— reasonably ok

444: JUNET— a major reseller of others' services
489: ITT— had and on realest for moderns

488: ITT— bad audio, useless for moderns
777: 6TE Sprim— usually good quality—invats

some calls at all, especially reat short ones. And considers that this two-stage filling process calls this way. The fun part starts when one door and demand your firstborn for making your referred to as a "cosual caller". Most of the major as much as a 6-month lag time between when involves a lot of red tape and paper shuffling, and legal and noticely is going to come pound on your existing account. Note that all this is perfectly ones usually want an access code and a precarriers will complete casual calls. The smaller there is a chance that you won't get billed for you make the call and when you get the bill for it. poonly designed software. This can often lead to the affertable (i.e. not AT&T) carriers often have camer who "doesn't know who you are", you are When you complete a call this way, wo a March, 1987

if you do get billed, the rates will be reasonable. Note that if you don't have an account with a given company, you won't be able to take advantage of any bulk rates they offer for their known distances.

again, but this policy is pushing the process which may be free calls for the customers, and resulting chaos will have many effects, one of botome casual callers, the more sharted up the are going to choose AT&T because it's what along. The majority or people aren't going to ATST and eventually everything will work right the little carriers will told and get sucked up by attempting to suppress knowledge of this. Notice the carriers and LOCs being to bed to either saling process is going to become, and the best qualify anyway. However, the more people want to deal with shapping around for carriers, anything new. Now, it's afready highly likely that carriers. They want you to pick one and set if up you can "tenex" dal, i.e. 10mm, through other ballists, riowhare do they mention the fact that completed, that the local Bell companies are invalved in getting the billing properly ase business, or knuckfe under completely straighten up their acts, disable casual cells and (acy've come to total, and their lines are still the that which you get your equal access carried your 1+ carrier so you don't have to lean this likely that for this reason, i.e. all the mess

So where can you get more into about equal access, if not train your local company? You call \$201-332-1124, which \$418 ft will happily complete for you, and talk to the special consumer awareness group deficated to helping people out with equal access. They will send you tree of charge, a list of all the carriers which serve service numbers, billing structure, and lots of other near info. The LOCs will give out this number, but only underduress. They will not give out any information about other carriers, including what ones serve your central office, so you shouldn't even bather trying. It's apparently been made a universal company policy, which is indicutous, but the case.

Let's get into some of the technical expects of this. First off, you might ask, why 10 nin? Well, it could have been 11 non loo; but it wasn't. Hyou think labout it, other, numbers could be mispassed as the beginnings of area codes, 3-digit.

Carrier codes also leave plotty of room for well. This mechan expansion (how). Some of the carriers won't because it's realise complete carriers and many even nine.

CHARLES SOUTH STATE OF THE STAT Carriers can hold numbers to not complete calls from in their database, as well as regular take them long to fix it. It's conceivable that the the resulting bill from this; but it usually doesn't you dialed it from home. It is unclear who gets is, it happily completes the call for you as though camer usually has noticed of what a public phone equal access, the central offices do this eracl fot of tun is that in areas that have recently gone same process for public phones. And since the bulk rates apply, and a lew other things. White it's doing this search, you get silence. What's a rigure out if it knows who the calling number is, Structures and hardware, so it takes some time to the carriers. The carriers have differing database notice that this process takes longer for some of your number and the number you want to call to office simply passes the entire packet containing the carrier and lets the carrier deal with it. You'll recordings to the effect of hinvalid access gode complete casual calls, and may even give Basically when you dial this way, your centra

Some carriers also handle 0+ calls, if you dial 10 nm 0+ instead of 1+, the office will hand it off as usual, and you'll be compached to the carrier's switch, which gives you a tone. You are expected to enter your authorization code at this point, and then off the call goes. This is so you can complete equal-access style calls from finends' phones and use your own billing. It also requires that you have an account with the carrier already and an authorization code to use. Some carriers, in places where the public phone bug has been places where the public phone than this way as

"The procedure for placing a long distance call is now above the understanding level of a good proportion of the public, and the various companies are doing very little to educate them."

well. This mechanism introduces a security hole, because it's real easy to determine the length of a valid authorization code; from this since something happens right after the last digit is dialed. Carriers that don't do this will sometimes tell, you to idial "operator-assisted calls" by dailing 102880 Fithe number you want. Already they're admitting that AT&T is better than they are

digit hasn't been defined. Many of the carriers eventually either hear ringing or nothing if that immediately upon being dialed and look like authorization codes but go of have magic digit sequences that would otherwise working if wihas no further effect; you'll may start a call to an office. You can tell it it's cancel or recall. Some carriers use \* for this Arryway, if # breaks the tone, an additional digit digits have already been dialed then it is a regular these. Another # should bring the tone back; if dial # and the tone breaks; you may have one of and other things: If you get the switch and then their ousborner service offices, various test tones have special sequences you can dist there to get the carrier's switch is useful, because they often runter or 950-something. Being able to get to switch directly without having to dial a local jetting around to using the # key as sort of an end-of-digling leature, so you can reach the switch if you dial 10mm#. The LOCs are finally his will also usually connect you straight to the And as if this wasn't enough, carriers that do

equipment, their hands are sort of fled. But get billed for the call whether he wakes up or not. AT&T is so relicion to haid than supervision phone ring 20 times because he went out drinking up after 6 or 7. So if you listen to your brother's This is sort of a cheapo compromise, but since ast right and is now dead to the world, you will nings takes, assuming that most people wall give started yet. These are usually the time that 8 the LOCs and AT&T; have not done so yet, so planning to install this through agreements with picked up. The attemates, although they may be return called end supervision, i.e. the signal that group sheet. AT&T is still the only one that can they use timeouts to determine if billing should be tels your local office that the called party has the alternates, as one may see from the consumer Call timing and billing is a very heavy issue with

# the telecom informer by own router

Updated Equal Acress List

so the owner of the phone line gets the are often "fixed" so that you can't make bill, not your in response these phones back to you. Also, third party. this from a hotel phone, it will never get other earriers may not eatch up with you entering IOXXX (where XXX is the using just that one to make calle. By payphones handle these calls incorrectly. for several months. However if you try are free though. Sometimes calls on Don't be fooled into thinking that these make phose calls on other carriers. carrier code of your choice) you can distance carrier, you aren't stuck with Once you pick an equal access long

End of Non-1+LD Dialing

know, many downtown urban areas. well for years: but as logal 2600 readers as the second digit. This plan worked fown or area which it covered (as in equivalent letter combination; therefore dial petther the 0 nor the I has an thor has the second digit (on a telephone 516; 201; 703). Central office exchange PENnsylvania 5600) none had a 0 or a 1 codes were not allowed to use either the code has to be either all or a 0 (i.e. 212) came from), the second digit of an area Plan Area also known as area codes. (where the acronym NPA-Numbering North American Numbering Plan calling area is second largest in the US (Northern VA) or 301 (Maryland); The area code or instead either 703 exchange area code. Every number in the old ESS programming back which will disappear on November, Ist, 1987. A an area code or 14). According to the from any phone "locally" (i.e. without about 70 miles in diameter, second only 202 is dialable either using 202 as the distinguished between local and long few CO's in 301, 202, and 703 still allow when they named exchanges for the to Atlanta. Any number can be dialed distance calls by the second digit of the not require It dialing for long distance Page 8 March, 1987 The last area of the country that did

> City into 232 and 718. broken into 213 and 818, and New York measure is ineffectual, as was area codes). As this practice spread; it every darun exchange they could get demonstrated when Los Angeles was for long distance. Now even this the second digit (they used Canadian exchanges). In the mid-70's (the exact building ... Well, you see what I'm in the 70's along with a huge expansion became necessary to get rid of the ESS three years of 2600) Los Angeles (213). date is published somewhere in the last their hands on (especially as companies leading up to? Yup, the teleos needed the growth of the skyscramer office tack which allow users to avoid the 1+ had the tirst exchanges with a lor a 0 as liked, their own Centrex or PBX: in American business's bureactacy and proliferation of computer and data lines switchover to ESS. Also, with the areas had old inefficient X-bar switches million, as often downtown business Code full was nowhere near over 6 you think I'm exaggerating), as the first 6,400,000 numbers (but read on before about 8\*8\*10 = 640 exchanges handling number combinations (which is a lot, used up all possibly allocated three shut down an area for even a day to do a and the phone company couldn't dare. and second digits couldn't be 0 or. ().

Newly Direct Diabable Countries

dislable at this time too. Longa was: self-governing region of Dentrark. Denmark (1+45+42) but no longer. The able to dial the Paerce Islands via Longa (676) may also become direct Facroe Islands; like Greenfand; are a Marshall Islands are 692. You used to be Malta is 356; Micronesia is 691, and the exotic corners of the globe. Using 2/8 as announced effective March 13, 1987, boxes or bogus cellular ROMs, AT&T your country gode you can reach the Facroc Islands: Greenland is now 259, that it was adding routing to even more For those of you trying our your blue

Design

drop us a line communicate your message, in short, anything to cards, newsletters, printing mailing services... with design, flyers, business When you need a hand

Coram, NY 11727 12 Whitfield Lane UPPERHAND

# still more on the world of cosmos

care of the Letters Edijor, You have the right to seading this, you still have questions, write to us of GOSMOS should also be included. If, after about everything the COSMOS expert would rood to know should be here, while everything attempting to tackle the subject. Now, we requires need to get an idea of the capebilities agaroach it with more of an eye to select utset have created more questions than answers in to control your phane line. However, we soon to ine isanas program usad by ihe phano company We've run articles in the past about 00 SMOS,

### THE BELL From PNOC Legion of Doom

what their status is, COSMOS is used by many cosmos is a database program used by various telephone companies to keep track of for keeping track of both wires and paper separtitients now. It was originally for use in the leighbor's numbers are currently available and central office facilities. COSMOS gives itame room and loop assignment center (LAC) ufformation such as: how many cables or

entered into a billing competer. Once the billing complete the orders, the people who use it du. most. Keep in mind that CUSMOS docsari billing is roost likely what attracts hackers the COSMOS can theoretically be completed without COSMOS. The fact that a service order placed in defails are in order a service order is input into from the business office, the majurest for survice is When someone orders a sew telephone the

## Dispelling COSMOS Myths

Massachusetts to due in New Jersey. Each 800 (Self Operating Company) computer system is You cannot get from a COSMOS system in

In earlier versions there were two commands --Maintenance Operation System; from COSMOS transferring data, laps from COSMOS to LMOS This is no longer done. LMOS and LMOSH which were used in You candnot get onto LMOS (2000

system which would alleviate paperwark—thus new supported by Bell Communications Research COSMOS was born in the early 70's: COSMOS is (BELLCORE); CDSMOS can now run on several Ball Labs set out to design a mechanized

Page 19 North, 1987 2600

types of computers. The DEC PDP 11770 and the Further ahead COSMOS may be run as big only run on UNIX-based COSMOS systems. In running upder UNIX (5.0.5). Generic 16 is the operating system. On AT&T 3620, CGSMGS is PDF 11745 (ne longer used) ran COSNIX as the mandanes, but has been a just on paper conlatest version. When generic 17 cords out it will the Sperry CCI, and some Pyramid superpiri with run on the following supermisis: ATS T3B20

be able to toll it from any other UNIX system. It you have entered a valid login and password. thes and prompt you for a wire center (WC) units if you find SNIX based COSMOS you will not

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THE PROPERTY OF THE PROPERTY O

Commos 18.0.3 Unix 5.0.5

Sata line trouble call; [3]

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(---and voo/se in)

(God rest its appl). . . . . . . . . . . . . . . . In this first section I am dealing with COSNIX

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COST ADMIT ESTA A LACT ENGLISH SASSEN S ATTACHER I CHEST COME TABLE THAT SHOT SHOT THAT

WIGHT ALTERNATION, NOT IN SECTION BY

нариментуй (Артан интелементальная менения) (Артан интелементальная в 1935 г.) — 1933 г. — 1933

The options for a specific TTY are kept in a fills the TTY earnmand. The system console is \$100 T196. You can also get your T1Y number by using logged in on. TTY numbers range from TT01-That is the teletype (TTY) that the use What does this all mean?

(combined on page 15)

## The Ballad

Leave them in the phone booth as 12th Street From the trash bin, go get the old print-outs, We'll show those bastands what for! Lenny, help me get into their system. The results from the latest field test. So we'll have or go in the back door. The entry code's secret, that much I know

And I will lake care of the rest!"

Then he drapped out of sight for a couple of

Till the phone rang one night with a call from his We heard nothing from Lenny as well

Seems they found him one day after work in the With a pretty sad story to tell.

And threatened to sorid him to jail at the didn't Solif out every thing he'd done wrong. With his nose where it didn't belong,

But they wrong out of him every secre-And who knows what they threatened to do? Now Lorny was never the strongest of men. hednique,

The North Manitoba Cornection, And their very first act was to be to sturt down Every blue-boxer's trick that he knew. Turned their energies in our direction. Then they fined his ass, left him out on the street

Twas as if they had buildpred the house you Haw important these little things are. that news hit us haid. It's surprising to find

Or shot down your favorite bar.

And us phone insules were hermits, for the most

And the Exchange was the bridge "tween our Expent within our own tettle clanpersonal islands.

Our one link with our fellow man.

We didn't talk much; there was not much to say, then one at a time, as the lines each were out Just a feeling of gloom in the air, The online contingent was there. On the evening the shubbown was scheduled,

And more than one throat was constricted with Une voice, then another wont dead.

(continued from page 5)

And the silence replied in a voice that I knew mough I knew that no one could have heard. To the silence, I whispered, "Forever farowell! Or a man with a dead telephone. By the deat, or survivors of nuclear blast, With a silence can only be known Well, Torever is so strong a world!" Then soruptly, my phone became silent.

They Captain: My God: Where are you? How you

Suffice it to say that I've fixed it so that And how did you manage to tap in my circuit After they pulled out the line?" "And better not ask where I've been. And where we you been gone all this time? Better not ask how tham," he replied,

"You might say that I'm no longer a part of your

When they looked you cut, they looked me in!"

But the trillion connections twixt billions of No longer reside on your plane.

And I'll see to it they toe the line! You could say I'm the Phone Company's A mold of computer and mind. And now I am part of that system: Form a system complex as man's brain. **Officience** 

Gotta go naw, can't keep this line open much

lapped into the system for good! And things worked out just as they should. in a way it is fitting, the way he would choose, He's gane to blue-basers' heaven: And I sat in the dark, a dead phone in my hand, And his vaice faded out to a hiss, Left alone consumplating on this:

And the thing never worked, or would scream in When the newfangles thing first came out, Parhays you subscribed to the personal phone Well, you know the rost of the story. The facts are no longer in boubt.

Grabbing old Mother Bell by the balls? But now you all know, they was just Captain Or buring up in the middle or calls,

As our last goodbyes, they were said

(continued on page 22) March, 1987

# PRINTABLE LETTERS

## An Envelope Please

Dear 2600:

But 2600 isn't exactly Newsweek twelve items or less! waiting in the express line with my Inquirer and TV Guide white I was After all, it costs money to publish magazine rack next to the firational either! I haven't seen 2600 on the consider 2600 to be an underground or issues without envelopes. You may not a charity to phone phreaks. However, 2600 and your group isn't operating as illegal publication, and perhaps it isn't do object to the new policy of mailing don't object to the price increase

do by mailing 2600 in envelopes where envelopes. 2500 to come to my mail drop in Big Brother, I want future issues of it will be away from the prying eyes of some pencil-pushing bureaucrat has to minimize the amount of paperwork to write a short novel already! Let's surveillance and harassment. I for one report recipients of "subversive" have enough material on my activities FBI fale. Hoover's Henchmen probably cannot afford to add any fodder to my material to the authorities for possible postal clones have been known to subscriber can't be too careful. The personal privacy and freedom, a 2600 all for it. However, with the Reagan Administration era of decreased have "Freedom of the Press," and I'm In this country we are supposed to

well into a 3-ring notebook like the old to the original style? I bet it would be format did. How about changing back looks great! Unfortunately, it doesn't fit About the new format of 2600: it

is a jerk! He was literally stealing from most of us already knew; that Cheshire Dead" by Cheshira Catalyst in the years. It just goes to show that you January 1987 issue confirms what his fellow phone phreaks for three The stricle TAP: The Legend is

> among threves? days. What ever happened to honor can't find an honest criminal these

number is 212-569-5459. Osband and the "Large Manhattan Avenue and 40th Street. His phone Bank" that he worked for is Republic up with the name Richard Cheshire? National Bank, located at 452 Fifth His real name is Robert "Ozzie" By the way, where did you ever come

Discreetly.

never be able to function efficiently. became so bagged down that it would the bureaucratic machinery would opened on them for that reason alone, bureaucrais. Think about it. If inferests as far as waire concerned And that would be in everybody's liest everybody who receives 2600 had a file the notion of minimizing paperwork for First of all, we never would support

worry about being "watched" are people who read 2600 that should worry about. You would be amazed if organizations that subscribe. The only not enter nito it. those that are already being you saw the kinds of people and "watched". In other words, 2600 does Seriously, reading 2500 is nothing to

something about it. or delayed in the post offices. Domestic Eitherway, "they" know you're getting is not the case, call us so we can do customers should receive 2600 no whether or not it's being manhandled difference getting it in an envelope that about 2600, we really don't see what later than the 20th of the month. If this it. What we're more concerned about is has our return address on it will make. Assuming "Big Brother" knows

obligation to our subscribers for getting this costs us extra. We consider it an magazine in an edvelope even though We will continue sending your

foursware us Admis suegrams need And about that phone number you

> been changed remotely by outside seems, the outgoing message has influences. Retributive hacker justice, messages. More often than not, if Mend's apertment to send and receive machine that Cheshire set up in a

## Comments...

Doar 2600:

complete collection of back copies? binder" format. How do I add to my incompatible with old-style "3-ring New format is very readable. But

read all the mag, so you don't have to beginnings up front. necessary for cheap tabloids. We all "bribe" us by putting all article "Continued on page XX" is perhaps

Am I really the only life subscriber?

suggestions from readers on this. method of filling. Wo'd appreciate Since the new format is easier to carry rate. At the same time, a 24 page issue more in order to qualify for reduced around, it shouldn't be hard to devise a less on a page to accomodate the holes. new format but then we'd have to print impossible. We could drill holes in the with our old size is currently cents a piece, which is the first-class rates. We simply cannot afford 39 our magazine must be 24 pages or postage requirements are such that incompatibility. But second-class We are quite aware of the

never to be bothered with having to their \$260 has earned them the right inevitable. And no, you're not the only renew again. they are all quite happy knowing that lifetime subscriber. We have a few and a magazine sometimes make (hen) possible. But the realities of laying out We avoid "jumps" whenever

# And More Comments...

Dear 2600:

format. First, I miss the large format. Its I have a few comments on your new

them all), 2600 should be filed for As stated in your first issue (I have simple. Lalsomiss the loose-leaf holes the page-numbering made referencing makes this very difficult. reference purposes. The new format large pages were easier to read, and

and supporter of 2600, would not like printing more information. I just don't undertaken. For one, it's expensive. A for me except use up my subscription this method of distribution to be (where a litestry cover is important for sold at newstands or bookstores and accepted magazine, maybe even loct 2600 has mass-market appeal. dollars which could be better spent ancy three-color cover does nothing impulse sales). Imyself, as a subscriber 2600 to become a widely distributed I think I sea your intentions: you wan!

columns as necessary, and keep the *the old formet!* Just add new pages and To sum up my opinions, bring back

this simple formula: by printing cellular telephone frequencies that can be derived from P.S. You wasted four valuable pages

CHANNEL\*.03) where: CHANNEL=1 FREQUENCY-869.97\*

Frequency=870 to 889.95 Mhz CHANNEL=(FREQUENCY-869.97)/.03

Bernie S.

them a couple of steps; doesn't it? print out a list. Seams like we've saved calculate them. After all, what would frequencies were instead of having to valuable pages. And, while some they do with the calculation? Probably, considered that a waste, others were happy with it because, for the first time, hay could actually see what the Correction: we only wasted three

this to be a great way to aftract new here. We have experimented with a few and had positive results. We find concerned, 2600 does have a future As far as distribution at newstands is

(continued on page 1)

based by a silly timeout. completed or not, so you want get emaneously own records of what call and what carrier and if is meant what. But in general, you should keep your or leng lists of what person to-person name trying to yell through non-accepted collect calls moders, this could have some interesting conserved, allo avaids passing oil operators by applications as far as message passing is With the advent of 9600 hand voice-grade notice that it is likely that you wan't get billed for arical short call that is answered quickly, other.

that responds to it access, 2600 would often reset the local switch and refurnits dialitane. This is less common these and therefore may be employing good eld single. days but there's a lot of equipment still out there them, in the early days of carners before equal frequency trurks, i.e. 2600 Hz will disconnect warned-over AT&T stuff from a few years ago sort of like roulette between satellite equipment you're really talking on, bocause it's So if you use Allines, you can never sell whose this latter-generation switching equipment is Tsoroways, or landline and who owns it. Some of bulk rates and receils the service to the customer Long Lines for their over use. Altheir, for example equipment; they also often lease lines from AT&T leases equipment and time from other carriers at Carriers often use their own switching

examine their billing structures carefully. You can than choose the one that's cheapest for a given modely goes is to sign up with air the corrers, and dialing. Probably your best bet as far as saving on your phone and don't know about tenex people who attempt to make lang distance calls call will not complete. This is great for confusing so if you pick up and diel 1 + area + number the condition where you do not have a default carrier, you to sign up). However, no-pick is the cruste an account |or you may get a packet of they got selected for you they will probably want into from them in the mail anyway, because it rates from this carrier unless you call them up and default on 1+ dialing. You still won't get bulk will wind up with any random carrier as your sounds like. If you simply don't pick one or return another valid option that isn't on the ballot. It is called 'no pick', and is not exactly what it the ballet, you get tossed into a fortery and you When you select your default carrier, that is

> yot tried to market a program that will do this for do this, however, it is suprising than nabody has call at a given time. You disy need a computer to

and then you'll have to deal with books billing. So with fraud. Someone may even find your oude arisy be unlimited free railing via their equipment might even ofter you a job, a side barrelit of which come up with a 6 to 8 digit valid code, one thing and this carrier is going to have a lot of problems about it. They'll thank you in the long run and you might do is call the carrier and tell them if you find some eigerithm which allows you to you can, then it's plear that someone else can, and see if you can break their security easily. If you are interested in purchasing service from, it is often interesting to play around with a carrier probably come after people who do it. However, authorization codes is illegal and they will software have largely eliminated this as a major problem, but it took a few years for them to get authorization codes and improvements in the valid codes to be picked out very quickly. Lunger the idea. Mote that abuse of other peoples and a valid one would error out. This allowed the problem in which an invalid code plus some sequence would return stionce and allow recall 191 or Cemer "nn. Most of the carriers have fixed take the turn of invalid called area codes, like dialed after a trial authorigation code, will inform having to dial an entire number. These usually the caller if the code was valid or not without only security hole that certiers have to deal with here are often magic sequences that, when Post-parse, or filtring+ dialing, is not the



# cosmos: the universe unfolds

CARENT LEFOLLINES.

which eyerein they wish to enter. An 11770 of multiplexes. Build a Buttliamps. These are hooked up to a DATAKIT usually has 60 TTY's Circuit System), A DK allows used in select MUX=DX indicates DATAKIT VCS (Virtual asynchronous, 16 line multiplexers, 02 is a (98 opposed to 96) 0211 is an asymphonous 9 or 16 line mex DZ11; chese are less expensive than the EU11. A MUX =: POP 11/70's can have different types

at a moderate level. many aid is slow down 300 based so they are kept nults (control-gr) to be sent before each line. The time to print without slewing down CRTs. Teo they can receive. Natis will give the printers more These pointers cannot always point as fast as users logion to CDSMOS with printing terminals males sent and equal to the DELAY number. Merry DELAY : This wood specifies the number of

program called /BIN/LCASE when a user logs UPPERCASE. This is achieved by running a UPLOW converts lower case and echos at in UPLOW: COSMIX uses only upper case

TROOK (Turl OUSSEX). EDHO: Indicates that the computer will early

PASSWILfile but has some differences. Here is a (password) life. This is similar to the (UNIX COSNIX, like UNIX, has an /ETC/PASSWD LOGIN: hadicales that you just logged on.

第四十分第四十分を行うことなったと同じ日本の日本の別

Sample / ETC / PASSWORD for

图形 的复数形式 (100 CC) 是图引起 (100 MAC 图 100 MAC R 1 日本日本の日本教会 EC 1975 Aの日本日本の日本の日の中国の主義的であり の後の公司を受けていているのは数には続いて国際の表現の最初の最初の 大学(C) 1000年度(1800年)200日年1月1日 100万万里,100万里 (2) 中国 (1) 中国 (1 

number, 4) description helds (unused), 5) dialup (1=full access, 2=shell user, restricted access) user (Y for yes, nothing for no), 6) user group Forme directory, 8) path. 9) path... 1) usemane, 2) encoppled password, 3) user the password file. The fields are as follows: follows. The fields are separated by cobins "in The fields of a COSNIX JETC/PASSWO are as

only user who can execute the change of COSMOS database manager (DSM), 0:1 is the computer maintainance center (MINO) or the The 60M accounts are used by the mink-

March, 1987.

password command, As in UNIX aimost never left that way. /ETC/PASSWID can be felt unprotected but is

(continued from page (0)

als, and privileges (in some cases) can access them. It also specifies dupled, haud this file lists the TTY numbers and which users COSMIX has another file called VETC/LINES

25-10,0368-PenSer; Da,5049,UR, Sr, bit F2-5 5年,每年的大学中的工作,2月12日,19月1日,19月1日,19月1日, 1-21.16/28/5/2017/8/1917/1915/11/2017/8/1919/8/1917/8/

MESSAGE try your prompt will be an asterisk. II system console) stating that someone just ECHO there, then it's for half diplex users only. allows all users. If a line doesn't have the word Sature of COSNIX will pick it up. the /ENC/LINES file is changed, a security ogged on with privs. If you legin with privs on a MESSAGE will wate a nessage to T100 (the iser has an asterisk after the group name then it ndicates which users access which Triss. If a the first field is the TTY number. USERS=

CESTED products that a beginning which The supplement of the particulation THE PROPERTY OF STREET STREET, STREET,

/USB/COSMOS directory. GUSMUS commands are kept in the can access which COSMOS commands. The /ETC/MATRIX.S file says which users

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March, 1987 Page 15

# what cosmos can do to you

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The JETCOMATRIX State gives the different user group numbers, then makes a table procentiferencing them with command names. A 1 means that family can use the command and a 0 means they can't.

## Profixs and Wild Gestriptions:

AR Associated order: When creating a service order (090), the option AD can be used. This indicates that there is another 080 pertinent to the one being worked with. The two orders should be completed together.

"BL: Bridge Lifter: These are used with salephone answering services (TAS). The TAS has an extension of the customer's line. A BL allows one location, the customer's house, to have priority. If the TAS is on the customer's line, and the customer gicks up, he will have priority and the TAS will be disconnected.

BTM: Billing Telephone Number: This indicates that one line's calls get placed on the bill of another line.

• Oths Custom Catting Features, COSMOS has an option which can define the leatures (three way, call waiting, etc.) on a line. These features would be, for the most part, fisted by shore characters. This option can only be used with electronic or dioded affices.

electronic or digital offices.

### E-SCI Talkhalana

THE CONTROL OF THE STATE OF THE

(SAM is the teature identifier code in COSMOS. The codes following the switch names (1ES, DMC, 5ES, etc.) would be the feature identifier code on the different decironic/digital switches.)

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CP: Cable Pair: A CP is the wire which goes from the central office (D0) to the rustomer's premises.

C& Class of Service: RES, BUS, PSX, DTF (Dial Tone First coin line). The CS is a general survice category. It varies from place to place.

Bit: One Date: A DD is simply the date a specific ORD should be completed by.

FID: Frame Oue Date: This is the date when all work on the Main Distributing Frame (MDF) should be completed. It is usually a day or two before the DD. This will ensure that the line is working, before a lineman goes to the customen's premiers.

start lines are mostly used by PBX customers. the tip (fead) to ground to get a dial tone. Ground dial tone. If a line is ground start you must touch meaning when you pick up the phone you get a start/Loop start. A normal line is loop start officials have assortial service: [4] Bround borroing of small Middle Eastern country) when lines are tied up (i.e. flood, hurricane indicates a good chance to get a foll call through one of the first restored. Essential service also crash (electronic), the customer's line would be Usually doctors, coin priories, and government switch were to break (electro-mechanical) or priority service list, in case of emergency, ti the Essential service means that the customer is on a location. [3] Essential service/Monressertial lead. This means the sleeve will be run into their rancy equipment such as a PBX will have sleeve indicates the line is busy. Customers who own tone/Botary. [2] Sieeve lead/Mo sloeve. A sleeve to all types of switching equipment. [1] Touch is part of a subscriber trunk. A grounded steele FB4: Features: These are time features common

WE that from: This indicates that with the line specified after the HF is busy cats will hunt to the TN in question.

# —and what you can do to it

8T: Hunt to: This indicates that when the line is busy calls will hunt to the given TN.

LIIC: This is the location of other the CP or OE.

00: Onfor Class: An OC represents special treatment for an OSO. I am not fully familiar with the different types: OC HOT indicates that the ORO is on a priority completion list and should be done right away. This is normally used when a customer has a service failure.

OE: Office Equipment: An OE is the physical pace of equipment that a line takes up in the switch. In electronic offices, there is a line card with memory which holds the attributes of the line. In electro-mechanical offices an OE is a small inetwork of electronic components; changes are hard wired and not kept in memory.

changes are near wires and out key millionary.

QRD: Order Number: An ORO is the service order's mane. It is indefinitive but follows a certain standard: It can be any group of characters (up to 25); but is usually the OT followed by 6 numbers (ORO OT123456).

The time the state of the state

01: Order Type: An OT signifies what a specific ORD does, whether it's a new line or just a change made to an old one.

PIC-Primary Independent Carrier: This option, while hardly used, will display the customer's equal access choice by its 3 digit code. Some systems use the sipha code, while most use the

NOTE: This is not a complete list of carriers but covers most of the big ones. This list serves a double purpose as the PIC codes are the same as equal access 10XXX codes.

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PL: Private Line: A PL is a special circuit set up. Detween Itwa CO's. It cap be a foreign exchange (FX), or WATS, or just any type of long distance connection. A PL name can be up to 25 characters and has little other information is usually kept in COSMOS: PL information is usually kept in CHRKS (Trunk Integrated Record Keeping System).

SE Special Equipment: SE is used when a circuit, usually a PL, requires something which cannot be achieved with an OE. Whos you look up a line owned by TELCO (Telephone Company) instead of a cable pair, it will have house cable. It will look like this:

SE HSE COL ST W. BATE 04-10-87

TK: Telephone Number: This is a relephone number, plain and simple.

Tr. felighbore number Type: This is not rigid. When a COSMOS database is set up, different TN's are assigned TT's. They do not have to be stuck to, but they are a good idea (organization, how novel).

USC (Universal Service Order Ocide). This is the COSMOS equivalent of an LCC. For example: 1-FR, 2-FR, 4-FR are 1, 2, and 4-party line flat rate, 1MR, and 1MB, are measured residence and measured business. DTF and DFA are first coin, 10-f is an official TELCO.

Essentially, a phone line is comprised of a CP—the wire which runs to the customer (continued on page 20) 2600 Malen, 1987 Tage

reaching out in the same way. see quite a few other magazines go to a halfway decent newstand, you'll does not mean we're "selling out" or trying to get mass-market appeal. If you never thought was obtainable. This provide them with knowledge that they know of our existence. We in turn will readers who would otherwise never

# An Experience to Share

Dear 2500:

followed all my calls for 11/2 months. Number Recorder on my line. They had personal disks. MCI had caught me hacking out codes and put a Dialed pirated programs, and a number of about 20 phreak/hack disks; 300 pack. Among those 300 disks were 350 disks, but left the Apple IIc power computer; printer; modem; monitor, room and taken everything discover that the cops had raided my after my 16th birthday, I came horne to One bright day last March, a week

calls (exchange hacking). MCI's computer, and annoying phone with 9 counts of various crimes including phone fraud, accessing of trial were hell: I was originally charged never getting any of my stuff back, etc. Tuve, having to pay immense fines, The next 2 months of waiting for my informally, threatened with going to lawyers scared me to death. I was My first meetings with probation and

codes I used I also had to serve 80 charges" of having to switch the 22 remain on probation until these items hours of community service and bills and the rest were "service counts, and had to pay a fine of \$479.32, \$29 of which were phone for his services, I got off on most of the lawyer and ended up paying nothing As it turned out I used a county

they missed quite a few). I did pay the minus 11 disks of phreak/hack stuff I got all of my computer stuff back

> officer was easily deceived: community service but my probation completed about 15 hours of what it should have been. I actually fine which was a hell of a lot less than

of being caught and what the end through what I did in those first 2 hope that none of you have to go resolution was (not very harsh). I do worth it. I wrote to give you my appount all and all I've got to say it was well I just got off probation last week and

The Sultan

history. Keep us posted: We care: you'll probably find yourself reliving something you can erase later. And if something you really believe in or you breg about this to lots of people. is never worth it unless it's Getting caught at something illegal

## Words of Agreement

Dear 2600:

getting my first issue of 2600 punched). Keep up the good work-(December 1986) was like a breath of bad it doesn't come three-hole with your new format (except it's too tresh, vonized air. Just a quick note to tell you I agree

## Words of Caution

efforts to allow us all to enjoy the ride moving sheads thanks for all your something that I also felt a part of though your excitement/pride was reading cover-to-cover, that I felt as Thanks for being there... thanks for surprise and I found, after quickly The mailman brought me your

there]. "Rub" the lamp call out the (Biven the very creative people out remain true to your present direction. subject/readers: It is my hope that you mainstream approach to its product/ Tell it like it really is like it can be will 2600 somehow move into a One worry did creep into my mind

# 2600 marketplace

other application software. Readers can utilities, and various word processing and contact me by writing: Software, PO Box 73. diagnostic programs, business software, products including the latest games. Uniondale, NY 11553 At present my PC library approximates 110 ANYONE having an IBM PC or compatible I'D LIKE TO TRADE PC software with

224A Washington St. #9, Lynn, MA 01902. it, this is for "informative" purposes only! Send your replies to Mr. Oscar Statuto, box. Of course, as you might have guessed enthusiast and would greatly appreciate it if WANTED! I am a beginning phone AND OPERATION OF THE BLUE BOX INSTRUCTIONS FOR THE CONSTRUCTION someone could help me in designing a blace

un a Zenith Z-100 running MS-DOS. PO 80x 752, Middle Island, NY 11953 Contact Manny @ 2600, (516) 751-2600 or WANTED: A decent modern program for use

Box 7528, Middle Island, NY 11953 paraphernalia. Write to Bill, c/o 2600, PO System Practices and other such trade/purchase. Also looking for Bell PBX's and switching systems. Willing to DOCUMENTATION on electronic & digital

2895, Brooklyn, NY 11202 have and name your price. Mr. B., P.O. Box Please describe the type of info that you CELLULAR TELEPHONE INFORMATION which has not yet been published in 2600. WANTED. I will pay a modest fee for info

and DAS 82981.1A, SERIES 5, 84 MG 04 Send into to: P.O. Bax 50346, Raleigh, NC 83 MG 12. The boards on the inside are says, 44A2 Series 1, Data Mounting, Interface. One has label on the outside that two moderns labeled Distaphorae Channel MANUALS OR INSTRUCTIONS NEEDED for labeled. DAS 8298 L1A, SERIES 4, 81MG3 DATA MTG, SD-10247-01-J23, SERIES 1 ID247-01-J23 and the other says: 44A2

missures/TSCM in the trade parlance, 425 Private Eye is into Electronic Counterequipment he can buy cheap! Gastamp from 2600 readers who have electronic PRIVATE INVESTIGATION wants to hear "F" Street, San Diego, CA 92101, (619)

TAP BACK ISSUES—complete collection, allow 4 weeks, to: Pete G., Post Office Box includes delivery. Send cash, check of MO copies sent via UPS or US Mail. \$100 schematics. Approx. 400 pages of quality vol. 1-83 plus supplemental reports and 463, Mr. Laurel, NJ 08054 (payable to PEI). Cash sent same day, others

people please, no businesses! making it too long) and we'll print it! Only send us whatever you want to say (without place! And it's fine to subscribers! Just for something to buy? Or trade? This is the Magazine. Got something to sell? Looking waiting forl A rather new service of 2600 HEY YOU! This is the change you've been beading for April 8808; 4/5/87.

(combined on page 23)

Mariet, 1987

from anywhere, and the OE is the equipment premises. The TN is the network address dialable which makes It all work.

### MODELLE TO

TH: \$1M. NS. HT. TT OE: COF. CS, FEA, PEC, US

D80: AC, DC, FDD, OC, OT

SE: Spare, unused WK: Working pair, in use

RS: Reserved for future assignment

Supply work on the part of TELCO UK: Unknown. This is raisely used, and shows

II de Defective caste

02: ground ring sate EL SIOT CITAL

Dis ground to side

IA: cross battery

Diff: open tip side Use opening side (ring side not connected)

07: upon both sides

DB: ground both sides

09: unbalanced voltage

a circuit. PC: Pending correct. The CP is being added to

RESOVED TOTAL STELLT PB: Pending disconnect. The CP is being

OF Official TELCO lines With Working, in use.

recordings.... T& Test line. Used on loop, terminations,

as NNX-0000 UND: Unique. Used for special numbers, such

NP: Nonpublished number, used when SF: Spare, willing, and ready (for assignment)

looking up the line to not disclose information such as crank calls. The NP informs people customer changes old number due to a problem AV: Same as SF. Source rather stilly to me.

MEN. SOL UK: Unknown, someone spilled coffee on the

change in survice. recording there will be an operator to announce a DM: Disconnected machine (recorded) 00: Disconnected number. Instead of a

intercept. The number you have reached has Joseph disconnected CB: Changed number, operator intercept

CM: Changed number, machine intercept Page 1 March, 1987

PC: Feating connect, the TN is being added to

renoved from a circuit P0: Pending disconnect, the TN is being

PC or PO, it will have a regular status (WK, SP DM etc.) also.) (In all cases it a facility (TN, UE, CP) is either

An OE status is the same as both a CP or a TV

### ST-DEW TOWN

S SKING TOTAL CB: Complete Disconnect. An existing cirquit NC: New Connect. A new circuit is being built.

changed (new TM, different FEA, etc.). City Change. An existing circuit is being

too familiar with thom. Find I: From and To. These are AO. I'm not

These are used when bills are left unpaid! SS and #8: Suspension/Restoral of Service

## TT - Inhabitorie number Opera:

group numbers (i.e. NNX-2000, NNX-2600 B: Business line. Usually thousand, or hundred

D: Official TELCO line. Usually NNX-99XX or & Cain line, usually in the SXXX range

To Test line. Usually NAX-99XX or NAX-00XX

NNX-1828, NNX-1818, NNX-5234, etc. runders which can be both residence or bisiness lines. The rumbers are usually catchy— 8: Good. This as far as I can tell is assigned to

ii.e. NNX-9089 or NNX-7689, etc.): Other, basically your run of the millinumber

range (i.e., NNX-1000 to NNX-1099) Centrex runtions. Usually a hundred group

SOL it says OT NO. This will only print out an ORD if its type is a new connect. You can specify 01, 00, 00, FDD, and 080 in an SOt use the SOL command. On the Hunt line of the To get a listing of orders in COSMOS you can

BOTH THE CASE WAY 7 2 2 3

WILLIAM DINE

を ののこと

# to know about cosmos

SOI command to list out an order. out what's happening. You can use the Will or the status oudes, but there as an pasier way to find writer's initials. Fin not that familiar with ORD auritiers. The column headed All has the OHO The column called CKT-ID has the telephone

### 三の名 月(1)1万

新型 100mm 10

## 於實及 你然不良公司作用 智道者

日本の 10 mm 以縣 既治 衛河海 医金属病 衛首 **東京会社 1008本書 2008年** 2154554 \$6 50 **東京の タガー! がかばり** 

Market Ma 品 の表に公 25月 智宗也亦是 75日 号音台人名 1 To

### 年 南 のかい日

国の元気

implemented in conjunction with FACS (flausity network of computers including COSMOS, WM Assignment and Control System). TAGS is a (work manages), LFACS, and others. FACS(YES) states that the order was

WORK IN HOUSEN MOF WORK REDITIES - this means that frame

completed the appropriate work. MOF COMPLIND)—the frame has not

has not completed its work. LAC COMPL(NO)—the loop assignment center

proper places. I'm not quite sure how that works. EST[00-30:16] is the time the order was input RCP(NO) has to do with terms being seat to the

to COSMOS: Warch abits at 4pm.

the CP and DE mout. LBC is the location at the MDF (frame) where

### Losmos Fun!

おとま 一日

PROOFE N

(五) 11大 12 近 橋かる 

(120年) 日本日日日本人生日 を見る は、1988 MANAGE OF LAND **第15条件 3次21条 第18条件** 会を10 150mmに 安部の首 556mm Feb (600 052) 聖を 三角 のいと 

d SH 114 (14)

の場合のかり · 通過日本 (水) 一定 二次指入法院

> location of the computer. The tells you what The COSMOS version and WHERE gives you are Whithtell's you which users are logged into which TTY and which W.C. WHAT gives you she An example of the three Ws of COSMOS

little) in ODSMOS. Bell Labs hunge. This is a little joke (very

### 264 ARE (cr)

ASSESSED PROCESS KILLED

line the NNX or 511 is specified and a startis of command you can scan for test lines. On the hund less is specified. This makes it easy to seen for CELT THE Using the LTM (List Telephone Number)

A particular and the San Control of the San Control

1

IN POLICY OF THE PARKS WHEN IN SOLD - BY

THE THE PART OF TH

	1.	三台 四日	
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		September 1981 - Septem	A BOOK STONE

which can be helpful when 'scanning'. The REMARKS column holds information

W. C. Belley To get a list of MC's, you can type WCFLOS

Page 21

高品品 新·S 高品 28年 80日28 (cr)

富

tape tinvos. Nevertheless, it makes a good I misti Reveniewabute, unless you have access to the The lest command is one which you should

D, J. 2 or E ENERO E corb

NA COS TAPE ESPOS--- EMP PRESSET AND STARS WENTERE

Telecom Informer (constitueed from page 8) around the country in accept 676 as implementation was delayed. assigned 676 last year, but translations for local central offices ionga haven't been rescinded even yet.

## Captain Crunch

It's been a few years since they closed the (continued from page 11)

When thing up his phone, a recented voice says "This number's no longer in service." And the ten dollar Japanese phone. When the Captain set off on his own. We've since seen divestiture. Sprint, MCI

And I know he still makes Ma Bell nervous.

But I know he keeps vigit, and I know he keeps

And revesor eligious when listening to answering

A voice will come through to me, faint, but Or sometimes when I'm un hold,

A voice I ranamber of old. But I know that he's talking to me. And you'd think it was leak-through from some Office Inc.

it's old Captain Carnet keeping watch on Ma The soul of the Phere Compacy. Page 22 | March, 1987 -

> collochause. The Minshel Show. acclain through the performances of Bill Stations. NJ. He also plays concerting, bonjo, recorder, as i elk Project, and menager for that organization's Jake and 10-7ce Mouyhas adlieved nationwide well as many other instruments. His Baltay or He's a board member and past president of the Mike Agranolf is a folk singer from Bonnton.

Spanton, NJ 07005. Write to Mike Agranott, RO 4 Box 45 Cak Halls Veroes, is available for \$6.50 pastage paid His collection, Jake, the Captain, and Other

中外安计司的

hobbing to do with phones. Determiner for semething that had absolutely Crunch, John Diapor, was arrested in tale As nearly of you know by now, the real Captain

pass, or give back mency. Washington OC also magnetic strip and either demand money, let you (BART) cards in San Francisco. These are the manufacture take Say Area Repid Transit has this kind of a system. cards you insert into machines that read a According to police, Draper was helping to

S11.500 tol. conspiracy, and computer traud. He's free on pleaded not guilty to charges of forgory. Oraper, who was arrested with two others, has

widely circulated among drackers. This caused appears they'll have to do it again BART to change the system once and now it California had contests, the results of which were 6481 system. In fact, several colleges in it's become a sort of sport to try and outwit the According to the San Francisco Bay Guardian.

if convicted of this, it would relogate the Capitain the probable prison term involved. nothing clever or ingenious about the latter and, to the status of a continuinthief, not to mention the general public, as he's being accused. There's another system, if that's in fact what he did, we hope, however, that he wasn't selling torgenes to We're happy that Captain Crinch cracked

greedy. That's a waste of a real talont. phreaks going to jail far being stupid and/or We don't want to see hadees and phone

access to the long distance telephone retwork entered the case because Brapos allegedly used rose phone, ran'i k? sophsticated electronic equipment, to gain tree hal's a pretly faircy way to describe a touch By the way, we're told that Pacific Bell has

(81 sgad avoid Janualands)

information in the hands of young raints without restrictions." power that comes from now how to control what comes forth...let magic forces...let Uncle Sam figure out excitement of fresh iddes and the raw 2600 readers enjoy the thrill and

Bon Harroll

Now why didn't we say that?

## A Response

Dear 2600:

good. Thanks for the extra effort to Cheshire Cat. Also, thanks for the fine TAP article by improve it, and keep up the good work. Your new format for 2600 looks

and that we are ripping-off the work of each) for copies of back issues of TAP complaint that we charge too roudh (\$2 others by doing so. We must respond to Arab 149's

When you don't copyright your work, it actually want this to happen. falls into the public domain and anyone implies that you either don't care or can copy and distribute it. And it [1] No issue of TAP was copyrighted

contributed articles to it. (2) We advertised in TAP and

falsely accused us of being in cahoots subscription fees to TAP. And we lost because of this. A few people even substantial credibility and business customers were ripped-off of as dozens of Consumertranic's several of our publications. We, as well (3) We highly recommended TAP in

competed with us to sell TAP back And no staffer, to our knowledge any former IAP staffer for doing this staffers. And we openly advertised the notified mutual acquaintances of TAF wrote TAP as to our intentions, and we resale of TAP back issues. At no time did we ever receive any objection from (4) Before selling copies of TAP, we

economics of numbers. Orders for TAP (5) Arab 149 does not understand the

> contrast and reduction must be made copy. Constant changes in copier issues. Also, TAP issues are difficult to charge \$160 for copies of all 91 back compared to making 100 copies. Mure work means more money! Also, we pur order. There's a tot more work back issues average about two issues tedious job! \$2 por issue is reasonable! formats and print densities. It's a as IAP issues have many different involved per issue in making one copy

costly and risky to acquire, and risky to much for information that was difficult, time you feel that you are paying too wrongdoing. We need your support to people had the balls to protest and fight situation is much worse today than it and appression? The personal freedom making business. We support government and big business rip-offs you acquire this invaluable and unique ourselves and children with it. Please continue! Think about that the next was in the sixties when a lot more information during a time of increasing 2600, and a few others, where would realize that but for Consumertronics (6) Consumertronics is a profit

Alamogordo, NM 88310 2011 Crescent Dr. Consumertronics John J. Williams

More on ICN

Dear 2600:

found in the February '87 issue of Consumer Reports: Here is something about ICN that I

5 percent of its customers' calls go cations Network. Among other things, company, Independent Communi-ICN roust now disclose that fewer than injunction against a second flat-rate recently obtained a temporary "In Wisconsin, the attorney general

anyone know ANI for Montana?. I also have one question-does

Montana